

95% confidence interval, 1.67 to 72.4). **Conclusions:** CRP levels, which were measured at stable phase, are not associated with infarct size but are significantly associated with long-term mortality of acute myocardial infarction in the reperfusion era.

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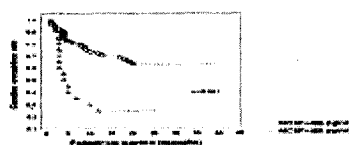
Increased Levels of Macrophage Colony Stimulating Factor Measured Beyond the Acute Phase Can Predict Future Cardiac Events in Patients With Unstable Angina

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Background: Inflammation plays a central role in the pathogenesis of coronary events. We evaluated the long-term prognostic value of macrophage colony stimulating factor (MCSF), interleukin-6 (IL-6) and tumor necrosis factor- α (TNF- α) in patients (pts) with unstable angina (UA).

Methods: We studied 119 consecutive pts, aged 58 ± 10 years, with Braunwald class IIIb UA. On admission, at discharge and 6 weeks later MCSF, IL-6 and TNF- α were measured and the pts were followed up for 2 years. Clinical end points were: cardiac death, readmission for acute coronary syndromes and revascularization.

Results: 113 pts completed the follow-up while 2 died of non-cardiac causes. Of the remaining 111 pts, 39 (35.1%) had a cardiac event (2 deaths, 15 revascularizations and 22 readmissions for acute coronary syndromes). Only MCSF and IL-6 levels at 6 weeks were higher in pts with cardiac events compared to those without events (424 versus 306 pg/ml, $p=0.0008$ and 6.6 versus 4.5 pg/ml, $p=0.01$, respectively). Logistic regression analysis showed that MCSF levels at 6 weeks were the only independent predictors of future events with an adjusted odds ratio for events of 4.1 (95% confidence interval 1.1 to 14.8, $p=0.03$). The 2-year survival free from cardiac events was significantly lower in pts with MCSF levels in the highest tertile (values ≥ 468 pg/ml) compared to pts with values <468 pg/ml (Figure).



Conclusion: We suggest that increased MCSF levels beyond the acute phase are strongly predictive of long-term outcome in pts with severe UA.

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Treatment of Obstructive Sleep Apnea Syndrome May Decrease the Risk of Ischemic Events

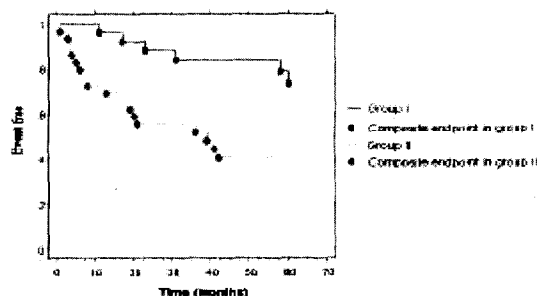
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Background: Obstructive sleep apnea syndrome (OSAS) is associated with an increased cardiovascular morbidity. The aim of our study was to evaluate the role of OSAS treatment on cardiovascular events.

Methods: We prospectively studied 54 CAD-patients (mean age 57.3 ± 10.1 years) with OSAS defined as apnea-hypopnea index (AHI) > 15 /hour. All pts had proven CAD at coronary angiography. Twenty five pts were treated (group I) with continuous positive airway pressure ($n=20$) or OSAS surgery ($n=5$); 29 pts had no OSAS treatment (group II). The primary endpoint was the composite incidence of cardiovascular deaths, ischemic events and cardiovascular hospitalizations.

Results: Mean follow-up was 74.7 ± 31 months. The 2 groups were not significantly different according to age, sex, BMI, smoking history, hypertension, hypercholesterolemia, diabetes mellitus, CAD and anti-ischemic therapy. The primary endpoint was observed in 6 pts (24%) of group I and in 17 pts (58%) of group II ($p<0.01$). The risk of deaths, ischemic events and cardiovascular hospitalizations was significantly decreased by OSAS treatment (OR 0.3, 95%CI 0.11 - 0.76; $p<0.01$).

Conclusion: Our data suggest that effective treatment of obstructive sleep apnea syndrome in CAD-patients is associated with a significant decrease in cardiovascular events.



1002-103

Acute Coronary Syndrome Patients With ST-Segment Depression Have Substantial Mortality Rates but Undergo Less Aggressive Management Strategies: Insights From the Global Registry of Acute Coronary Events (GRACE)

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Background: In patients presenting with suspected acute coronary syndromes (ACS), the electrocardiogram (ECG) remains the most immediately accessible and widely employed diagnostic tool for guiding subsequent investigation and therapy. Current guidelines recommend a more aggressive management strategy in ST elevation (ST \uparrow) or depression (ST \downarrow); however, a contemporary evaluation of the prognostic value of the ECG in a large, unselected population of ACS patients is lacking.

Methods: We examined characteristics of, and the prognosis associated with, the initial ECG in 19,453 ACS patients enrolled in GRACE (April 1999-December 2001). GRACE is a prospective, multinational, observational study of patients hospitalized with ACS in 94 centers in 15 countries from 4 continents, including Europe and the Americas.

Results: Initial ECGs were grouped according to type of ST-segment deviation or T-wave inversion ≤ 0.1 mV in ≥ 2 leads) or left bundle branch block (LBBB):

ECG Subgroup	ST/LBBB	ST \downarrow	T wave \downarrow	Others
N (%)	7325 (37.7)	3298 (17.0)	2782 (14.3)	6048 (31.1)
Median age, years (25 th , 75 th percentiles)	65.4 (54.5, 74.9)	70.0 (60.1, 77.6)	64.9 (55.5, 74.6)	65.8 (55.6, 74.6)
Men (%)	69.5	59.2	62.5	67.5
Prior diabetes (%)	22.3	27.8	23.3	24.8
Killip class II-IV (%)	22.1	23	14.8	14.7
Cardiac marker + (%)	83.3	69.8	49.0	46.6
Hospital angiography (%)	53.3	47.1	50.9	47.7
Hospital revascularization (%)	41.2	30	31.6	29.9
Hospital death (%)	7.8	5.6	2.1	3.3
Death post-discharge to 6-months (%)	6	8.4	4.4	4.1

Conclusions: Despite having high risk characteristics and substantial mortality rates, patients presenting with ST \downarrow ACS undergo hospital angiography or revascularization at rates similar to other non-ST \uparrow ACS patients. This finding suggests that guideline-recommended risk stratification based upon the initial ECG is not consistently followed.

1002-104

Difference Between Positive Remodeling and Negative Remodeling at the Coronary Culprit Lesion in Acute Coronary Syndromes

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Background: According to recent IVUS studies, positive remodeling (PR) at the culprit lesion has been observed in almost 50% of patients with acute coronary syndrome (ACS) and negative remodeling (NR) in 30%. However, little is known about the difference between PR and NR in ACS. Recent histopathological studies have revealed that PR occurred in plaque rupture with lipid core, whereas plaque erosion resulted in NR. The purpose of this study is to investigate the difference between PR and NR at the culprit lesion in ACS. **Methods and Results:** Preinterventional IVUS images of 111 patients with ACS (56 acute myocardial infarction, 55 unstable angina) were identified. The remodeling ratio (RR) was defined as the ratio of the external elastic membrane (EEM) areas at the culprit lesion to the EEM areas at the proximal reference site. Positive remodeling (PR) was defined as an $RR>1.05$; Negative remodeling (NR), as an $RR<0.95$. PR was observed in 44 of the 111 patients (40%), while NR was observed in 41 patients (37%). Patients with PR were significantly older than with NR (66 ± 9 vs 58 ± 10 , $p<0.0001$). Calcifications in the lesion were more frequent in patients showing PR than in patients showing NR (PR: 91% vs NR: 46%, $p<0.0001$). On the other hand, in patients with NR, no calcification plaque was the most frequent. **Conclusion:** These findings strongly suggest that PR relates to old age and calcification in patients with ACS. The differences in patient characteristics and plaque morphology between PR and NR in ACS may reflect different progression mechanisms of the two arterial remodelings.

1002-105

Predictors of One-Year Death in Men and Women: GUSTO-IV Acute Coronary Syndrome

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Background: Previous studies have noted gender differences in baseline characteristics of non-ST-elevation acute coronary syndrome (NSTEMI-ACS) patients but their impact on long-term prognosis is unclear in such a contemporary and large sample. **Methods:** In GUSTO IV ACS, 7800 patients with NSTEMI-ACS were randomised to 24-h, 48-h infusion abciximab or placebo. Cox regression was used to identify predictors of 1-year death. **Results:** Women made up 38% of the population and were older, more often had diabe-